Amendment to the Claims

This listing of the claims, as shown below pursuant to 37 C.F.R. § 1.121, will replace all prior versions and listings of the claims in the Application.

Listing of the Claims:

1. (Original) A spectrophotometric system comprising: (a) an integrating sphere that includes a sample port, an SCE measurement port and an SCI measurement port; (b) a first plurality of mirrors positioned relative to said integrating sphere for reflecting and directing an SCE beam emitted from said integrating sphere toward an SCE fiber block; (c) a second plurality of mirrors positioned relative to said integrating sphere for reflecting and directing an SCI beam emitted from said integrating sphere toward an SCI fiber block; and (d) first and second focusing lenses positioned intermediate said first and second plurality of mirrors, respectively, for focusing said SCI and SCE beams, said first and second focusing lenses being mounted to a lens carrier that is movably mounted relative to said integrating sphere; and (e) a drive mechanism that is coupled to said lens carrier and operative to reposition said lens carrier relative to said integrating sphere.

2. (Original) A spectrophotometric system according to claim 1, further comprising a reference beam measurement port defined in said integrating sphere.

3. (Original) A spectrophotometric system according to claim 2, wherein a reference beam is emitted from said reference beam port, and wherein said reference beam, said SCE beam and said SCI beam are simultaneously processed by a processor associated with said spectrophotometric system.

4. (Original) A spectrophotometric system according to claim 1, wherein said drive mechanism includes a stepper motor.

5. (Original) A spectrophotometric system according to claim 1, further comprising a positioning slide which interacts with said lens carrier to facilitate translation of said lens carrier relative to said integrating sphere.

6. (Original) A spectrophotometric system according to claim 1, wherein said lens carrier and said first and second focusing lenses defines a zoom lens assembly, and wherein said zoom lens assembly is configured to create an equal path length for the SCE and SCI beams.

7. (Original) A spectrophotometric system according to claim 6, wherein said zoom lens assembly is effective for measuring multiple areas of interest on a sample as to both transmission and reflectance.

8. (Currently Amended) A spectrophotometric system according to claim 1, further comprising an aperture plate detection assembly positioned relative to said sample port for selecting an area of view for a sample.

9. (Original) A spectrophotometric system according to claim 8, wherein said aperture plate detection assembly includes an aperture plate holder, a detection disk and an aperture plate.

10. (Original) A spectrophotometric system according to claim 9, wherein said detection disk includes a plurality of sensors deployed in a predetermined manner, and wherein said aperture plate includes an activation ring that engages a preset fraction of said plurality of sensors.

11. (Original) A spectrophotometric system according to claim 9, wherein said aperture plate holder includes a plurality of magnets for magnetic engagement with said aperture plate.

12. (Original) A spectrophotometric system according to claim 1, further comprising a sample holder assembly that includes a sample holder and a gas spring for dampening movement of said sample holder relative to said integrating sphere.

Claims 13 – 17 (Withdrawn)